



K4NAB News



Serving Aiken County and Surrounding Areas



Amateur TV, Where to Start

Tom (W6ORG)

Any Technician class licensee can get on ATV. Since the lower the frequency, the farther the distance, given the same power and antenna gain, the 70 cm band is where 98% of ATVers operate - it is also the lowest cost and easiest to get on. The 902-928 MHz band goes half the distance and so on. ATV frequencies work best with an unobstructed line of sight path between the transmitting and receiving antennas. So the antenna and height is the most important part of the ATV station. Antennas need to be made for the 70 cm band, preferably as high of gain as possible and the same polarity as is standard in your area. Low loss coax is also a must as it takes 150 to 200 microvolts into your receiver for a snow free picture and you don't want to throw RF away unnecessarily. Contact a local ATVer on two meter voice (144.340 or 146.430 MHz typically) and have them send a picture your way. If you don't know of one, call or email us and we will try to

put you in contact. Also check the ARRL Repeater Directory for any ATV repeaters that might be in your area. The transmitting ATV station talks on the sound subcarrier which comes over the TV speaker, and all those watching can talk back on two meters at the same time just like on a telephone. This is great for talking in beam alignment, commenting on video content, etc. Cable channel 57 is 421.25 MHz, the most common in-band ATV repeater output, and 60 is 439.25 MHz, the highest frequency used in the band generally for repeater input and simplex DX. Over the air broadcast TV and cable TV channels are amplitude modulated (AM) video spaced in 6 MHz increments and the automatic frequency control, AFC, in the TV set can usually lock up to within +/- 2 MHz of the video channel carrier frequency. Note that cable channels are on different frequencies from channel 14 up than over the air UHF channels and should not be confused. UHF broadcast over the air channel 14 is 471.25 MHz and 57 is 729.25 MHz, well above the 70 cm ham band. So all the commonly used 70 cm ATV frequencies (421.25, 426.25, 427.25, 434.0 and 439.25 MHz) can be locked onto and seen with most cable ready TV sets. To see your first picture it may be as easy as turning your cable ready TV to cable channel 57 thru 60 and connecting it to a good outside 70 cm antenna of the same polarity as is used in your area by ATVers. It doesn't get any cheaper or easier than that to enjoy another of the many modes in Amateur Radio. Make sure your TV tuner is switched to cable channels when you try it. Unlike slow scan TV - SSTV - ATV standards are the same as broadcast TV and your camcorder so your TV set is your receiver without the need of any computer or other black box interface. However, the 70 cm, 420-450 MHz band is the first ham band that has wide enough bandwidth for ATV and therefore can best be seen between antennas with line of sight. Amateur Television, ATV, is fun and easier than you might think to get on with all kinds of applications. Besides sending and receiving live action color video between home ham stations much in the way you are probably used to with voice on two meter FM, there is; televising live or from tape your ham radio club meetings to those who could not make it in person; showing critical locations to local emergency service groups during actual disasters, parades or races; seeing Space Shuttle video and audio if some one is repeating it from their satellite

TVRO; seeing the edge of space from amateur balloons or rockets as high as 100,000 ft.; getting a pilots view from a camera in a R/C model aircraft or real airplane, and much more.

Election Results!

The New year is almost here!

The club officers for 2009 are:

President
AJ4AU
Carl

Bosard,

Secretary W8SC
Steve Czaikowski,

Treasurer W4KVF-
Tom Arnold





ARLS008 ARISS to Celebrate 25 Years of Amateur Radio in Space with Special Events

Twenty-five years ago this week, Owen Garriott, W5LFL, made history by being the first Amateur Radio operator to talk to hams from space. His historic flight on STS-9 on board the Space Shuttle Columbia was launched on November 28 and landed on December 8, 1983. Garriott's ham radio adventure on that mission ushered in a host of what Amateur Radio on the International Space Station (ARISS) Chairman Frank Bauer, KA3HDO, called "out-standing outreach activities that continue today with the ARISS program."

Bauer said that many hams still remember that first set of contacts and downlinks with Garriott: "Those first contacts allowed each of us to share the excitement of space exploration through Owen's first-hand eyewitness accounts. Owen's ham radio legacy enabled space travelers that have flown on the space shuttle, the space station Mir and now the International Space Station (ISS) to share their journey of exploration."

Just last month, Garriott's son Richard, W5KWQ, became the first second generation Amateur Radio operator to travel in space and speak with hams. "What other hobby, except Amateur Radio," Bauer wondered, "could or would open the communications lines of space travelers beyond that of the space agencies or international heads of state?"

To celebrate 25 years of Amateur Radio operations from space, ARISS has planned a set of special event opportunities for December and part of January. According to Bauer, a special certificate will be available for those who communicate with the ISS, either two-way direct (with the ISS crew, the digipeater or cross-band repeater) or one-way reception of SSTV or voice downlink. "Several 'surprises' are planned over the month-long celebration," he said, and will be announced soon.

Bauer said that in addition to school contacts and APRS digi-operations, ARISS will configure the radio system for cross-band repeater operations to utilize the standard ultra-violet operations in low power mode during the first week of December.

Starting December 7, ARISS will then run a test of 9600 baud packet operations on 145.825 MHz. "Given that PCSat should be in full Sun starting December 9," Bauer explained, "we will switch to 1200 baud packet on 145.825 on December 14-19 to support double hop opportunities. At times, especially during the weekends, you might see some SSTV operations if the crew is available." Bauer reminded hams that due to ISS flight requirements related to spacewalks and vehicle activity, the radio onboard the ISS may be off for some portion of this schedule. School contacts and general QSO opportunities by the crew will also preempt this schedule for short periods of time. "But remember that if you hear these," Bauer said, "you still qualify for a commemorative certificate!"

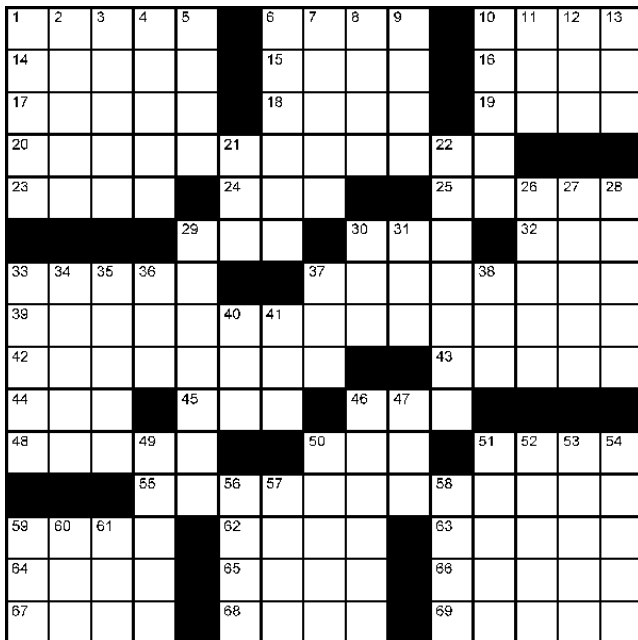
NNNN
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PowerPole Connector Configs for Different Supply Voltages

Hands-On Radio experiment concerning Go-Kits. (Experiment #70, "Three-Terminal Regulators", <<http://www.arri.org/tis/info/HTML/Hands-On-Radio/>>). A suggestion is to stack the 6V PowerPole connector pair one "above" the other, so that the longer side of the connector bodies are together. The 12V PowerPole connector pair can remain in the more common side-by-side configuration shown in the article. With the two different configurations, different voltage systems cannot be connected together. I've done this in my own go-kit and urge others to do the same.

"As the National Electrical Code recognized years ago, it should be impossible to plug something into the wrong voltage or current receptacle. Therefore, they set up the many standards for different kinds of plugs and receptacles for power distribution. A simple solution to the instant dilemma would be to lock the Powerpole terminals together vertically for the lower voltage instead of the more common horizontal method; i.e., with the flat contacts in parallel instead of in the same plane. This should reduce the possibility of plugging in the 6 volt devices into the 12 volt supply by mistake."

This is also noted on the HOR Web page for experiment #70. - H. Ward Silver, N0AX, Vashon Island Assistant EC, Western Washington; QST Columnist, Hands-On Radio

**Across**

1. How puzzle ends
6. Suffix with hard- or soft-
10. Radio personality K2ORS
14. Improvised
15. Suffix with radi- or modul-
16. Put in stitches
17. Whinny
18. Sailor's rum drink
19. Partner of FIGS
20. Outfit for dancing?
23. Dozen dits
24. Mo. for VHF QP
25. Legislate
29. Mo. for ID, OK, VA and WI QP's
30. HZ pilgrimage
32. US Army station
33. TA bigwig
37. Barren
39. Newington bar order?
42. NE to ZL from W0
43. They got 11 in '58
44. Tack on
45. Nav. rank
46. Classic rcvr maker from IL
48. Celebrate
50. Sat. type
51. Flex's
55. Shakespearean wireless dance?
59. Maker of the "seven drifty three"
62. RSGB is a member
63. W5 capital last name
64. Function on an HT, say

65. ___ Kringle
66. Classic vinyl
67. Combustible heap
68. If follower, to a programmer
69. C's low in the bands

Down

1. Unchecked items on a DXCC list, for example
2. Brainstorms
3. Adds water to latex, say
4. DXing LIDs, slangily
5. See 58 down
6. DL opera composer
7. Take ___ (travel)
8. Tripod place
9. "Cogito ___ sum"
10. OP lead-ins
11. DXCC item (abbr.)
12. Hams are on it
13. Nets make it up
21. KH6 is in it, but not for DXCC
22. Celebrate
26. Normal operator state in a contest, hopefully
27. Provide food for
28. Low cards
29. HK0 place
30. HHS, predecessor
31. Fire remnant
33. Route to VU from W9, e.g.
34. Tube cap
35. Test, on 7.002 MHz, perhaps
36. Hardly a beauty
37. T
38. Mode on 7.178 MHz, probably
40. W6 area net
41. Sm. radios
46. Decline
47. Jersey call
49. Moldova prefix
50. Large-eyed lemur
51. Lifted, so to speak
52. Crushes, as in a contest
53. Scoundrel
54. Flower towers?
56. Phone op's need
57. Countess's husband
58. With 5 down, ultra short wave moonbounce signal?
59. Brainwave radio?
60. Like yagi elements in winter
61. Shack on wheels



6 Meter Freq.	PL:	Callsign	QTH
☉ 53.030-		W4WTA	Augusta
2 Meter			
144.390		KR4XN-2	Augusta digi-
peater			
☉ 145.110-		KK4HL	Augusta
☉ 145.130-		W4JAK	Greenwood
☉ 145.170-		KY4S	Aiken
☉ 145.290- (100.0)		W4DV	Augusta Echo-
link node: KI4NFJ-R Node #325847			
☉ 145.350- (100.0)		N2ZZ	Aiken
c 145.370		AA4UA	Augusta
☉ 145.410-		K4KNS	Augusta
CCARC			
c 145.450-(123.0)		W4ZKM	Sav. River Site
☉ 145.490-		W4DV	Augusta
(Skywarn)			
☉ 146.730-		K4NAB	N. Augusta
(Solar)			
c 146.775-		KB4NA	Wrens
x 146.835-		KC4GSS	Thomson
c 146.940-		KT4N	Augusta
☉ 146.985-(100.0)		K4KNS	Evans
CCARC			
c 147.120+		KT4N	Wrens
c 147.180+		N4BMA	Augusta
☉ 147.285+		N4ADM	Aiken

1.5 Meter NOAA Alerts

162.400	WXJ20	Columbia, SC	1000 Watts
162.425	WXM88	Waynesboro, GA	375 Watts
162.450	WNG62	Aiken, SC	300 Watts
162.475	WXM93	Cross, SC	100 Watts
162.500	KHC29	Barnwell, SC	1000 Watts
162.525	KHA35	Orangeburg, SC	300 Watts
162.550	WXK54	Augusta, GA	1000 Watts

1.25 Meter

x 224.200-		Augusta
c 224.940-	WB4KXO	Augusta
x 224.960		Aiken

70 Centimeter

c 443.400+(107.2)	AC4WW	Aiken
x 444.400+		Augusta
c 444.800+	KE4RAP	North Augusta
☉ 444.900+(100.0?)	W4QK	CCARC
(closed system)		
c 444.950+(T162.2)	W4DV	Trenton ARCA

x = not coordinated with SERA c = coordinated with SERA

☉ = Full member of SERA

SERA = South-Eastern Repeater Association

NETS

Nightly Net	Daily @ 8:00 PM on 145.490 repeater
Carolina State Line Net	Sunday @ 9:00 PM on 146.730 repeater
Emergency Traffic VHF Net	Sunday @ 4:00 PM EST (5:00 PM DST) on 145.490 repeater
ARCA 10 meter Net	Sunday @ 8:45 PM on 28.368mhz
Newcomers Net -	Thursday @ 9:00 PM on 145.490 repeater
ARCA CW Net	Monday @ 9:00 PM on 28.170mhz
CSRA ARES Net	Wednesday @ 8:30 PM on 146.985mhz

2009

- Jan 5-6th ARRL RTTY Round-Up
- Jan 19-20th ARRL January VHF Sweepstakes
- Feb 19-20th ARRL International DX Contest (CW)
- Mar 1st-2nd ARRL International DX Contest (Phone)
- June ARRL June VHF QSO Party
- June ARRL Field Day
- July IARU HF World Championships
- Aug ARRL UHF Contest
- Aug ARRL 10 GHz and Up Contest
- Sep ARRL September VHF QSO Party
- Sep ARRL 10 GHz and Up Contest
- Sep ARRL International EME Competition
- Oct ARRL International EME Competition

Please send additions/ corrections to AJ4AU@ARRL.NET



Upcoming hamfests and events.

10 Jan 2009
Greenwood Hamfest
Greenwood Amateur Radio Society
http://www.w4gwd.org
Talk-In: 147.165+ (no tone)
Contact:
Darrell Manning, KI4BST
PO Box 2404
Greenwood, SC 29646
Phone: 864-418-8969
Email: dbmanning@wctel.net

10 Jan 2009
TechFest
Gwinnett Amateur Radio Society (GARS)
http://www.gars.org
Talk-In: 147.075+ (PL 82.5)
Contact:
Norman Schklar, WA4ZXV
480 North Peachtree Street
Norcross, GA 30071
Phone: 770-840-9664
Fax: 770-755-5411
Email: norman@schklar.com

7 Feb 2009
South Carolina State Convention (Charleston Hamfest & Computer Show)
Charleston Amateur Radio Society
http://www.wa4usn.org
Talk-In: 145.250 (PL 103.5) - linked repeater system
Contact:
Jenny M. Myers, WA4USN
2630 Dellwood Avenue
North Charleston, SC 29405
Phone: 843-747-2324
Email: brycemyers@aol.com

February 21, 2009
ARCA Winter Swap Meet
Pendleton King Park
Augusta, GA
http://www.w4dv.org/

28 Feb 2009
Hamfest #27
Dalton ARC
http://www.w4drc.com
Talk-In: 145.230(-) no tone
Contact:
Harold Jones, N4BD
PO Box 211
Rocky Face, GA 30740
Phone: 706-673-2291
Email: n4bd@windstream.net

21 Mar 2009
Kennehoochee Amateur Radio Club
http://www.w4bti.org
Talk-In: 146.880 - offset (PL100)
Contact:
Don V. Heppe, W5LGK
1425 Ridgeway Drive
Acworth, GA 30102
Phone: 404-630-1249
Email: W5LGK@bellsouth.net

May 9, 2009
Spring picnic & swap meet
Pendleton King Park
Augusta, GA

May 15-17, 2009 (Fri thru Sun) - Dayton, OH Hamvention
http://www.hamvention.org
Hara Arena
Talk in on 146.94-

Field Day June 27 & 28, 2009





IDEAS FOR CLUB ACTIVITIES!! YES ? NO?

January 2009

1. Outreach with scouts
2. Weather watch
3. Space contact demo
- 4th Kids Day
5. Spotlight on nets

February

1. APRS demo
2. Service to military
3. Space contact
4. Club "Guest Night"
5. Mall demonstration

March

1. Contest spotlight
2. DF demo (T-hunt)
3. ARES demo
4. Government outreach
5. RFI outreach
6. Spotlight on seniors
7. Licensing classes

April

1. Skywarn program
2. Focus on women
3. Mobile operations
4. "Build it" night
5. ISS contact
6. Walk America
7. Search & Rescue Ops

May

1. Mothers Day Radiograms
2. Coordinate comms at a local event
3. Dayton HamFest Tie-in
4. Focus on RACES
5. Memorial Day special event
6. Coffee Break

June

1. Present plaque to gov't entity.
2. Flag Day event
3. Fathers Day Radiograms
4. Field Day pre-publicity
5. Field Day June 27 & 28 and follow-up!
6. June Kid's Day / Camp programs

July

1. Independence Day Special Event
2. National Night Out
3. Donate a radio
4. Hamfest
5. Antique radio event
6. Ham Radio camp out

August

1. Hospital outreach
2. APRS demo
3. Hurricane watch
4. City's "Birthday"
5. Homeland Security
6. VE Spotlight
7. Legislative Action

September

1. Salute to Heroes
2. "Kickoff" special event
3. Labor Day road patrols
4. Fundraiser
5. Amateur Radio Awareness Day
6. Invite Scout Troop to club meeting
7. Blood drive

October

1. Demo at public library
2. JOTA
3. Remote control demo
4. Sputnik celebration
5. Fall licensing class
6. Halloween Special event from graveyard
7. NTS demo at club

November

1. Club elections + release
2. Food Bank patrol
3. Veterans Day special event
4. Santa parade support
5. Ham + another hobby meeting (RV, etc.)
6. Holiday lighting help
7. "Turkey Trot" support
8. Parking lot patrols
9. Food pantry donation

December

1. Santa on the radio
2. Shopping patrols
3. Ham of the year
4. Holiday special event
5. Holiday Radiograms
6. US Marines Toy Drive
7. Straight Key Night
8. Field Day results

Change any thing you want! Add anything you want!
These are just ideas and won't be anything but that until
you say something.

Just TELL us what you want!

AJ4AU@ARRL.NET Carl